



STUDENT REPORT

DETAILS

Name

ZIHAN

Roll Number

3BR23EE113

EXPERIMENT

Title

SPECIAL STRING

Description

Alice has a string A consisting of lowercase English letters. Her friend gives her another string S and asks her to modify string A and replace its characters with the characters present in string S.

But, to achieve the above task, Alice must follow the below steps:

- 1. Choose a character from string S that has the minimum ASCII distance from the ith character in string A

Replace the ith character in string A with the chosen character in string S

Your task is to find and return an integer value, representing minimum total ASCII distance that is required to modify string A to the characters in string S. Return 0, if all the characters in string S are already present in string A

Sample Input:

abcd

xyz

Sample Output:

86

Source Code:

```
def min_ascii_distance(A, S):
    total_distance = 0
    all_present = True # Flag to check if all characters in A are in S

    for char_a in A:
        if char_a not in S:
            all_present = False # At least one character in A is not in S
            # Find the minimum ASCII distance
            min_distance = float('inf')
            for char_s in S:
                distance = abs(ord(char_a) - ord(char_s))

                if distance < min_distance:
                    min_distance = distance

            # Add the minimum distance found for this character
            total_distance += min_distance

    return total_distance if not all_present else 0

# Sample input
A = input().strip() # Read string A
S = input().strip() # Read string S

# Get the result
result = min_ascii_distance(A, S)

# Print the result
print(result)
```

RESULT

5 / 5 Test Cases Passed | 100 %